This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously amended): A chimeric protein for detecting the presence or activity of a pre-determined protease, which comprises:

a) a cellular receptor repressor domain which represses activity of a normally biologically active protein fused thereto, wherein the repressor domain is obtained from a steroid hormone receptor or a bHLH/PAS transcription regulator;

b) a reporter domain comprising a protein having a detectable biological activity when not fused to the repressor domain, wherein said reporter domain comprises β-glucuronidase; and

c) a protease cleavage domain linking the repressor domain to the reporter domain, the protease cleavage domain comprising a structure that is cleaved by activity of the pre-determined protease.

Claims 2 and 3 (canceled)

Claim 4 (original): The chimeric protein of claim 1, wherein the protease cleavage domain comprises a cleavage site for a caspase.

Claim 5 (original): The chimeric protein of claim 1, which further comprises a spacer between the protease cleavage domain and one or both of the repressor domain and the reporter domain.

Claim 6 (original): The chimeric protein of claim 1, which comprises at least one repressor domain and a plurality of reporter domains, each linked to the at least one repressor domain by a protease cleavage site.

Claim 7 (previously amended): The chimeric protein of claim 6, wherein the plurality of reporter domains are different from one another.

Claim 8 (previously amended): The chimeric protein of claim 6, wherein the protease cleavage sites are different from one another.

Claim 9 (original): A chimeric protein for measuring caspase activity, comprising a hormone binding domain linked to a β-glucuronidase enzyme by a peptide comprising a caspase cleavage site, wherein the β-glucuronidase is inactive due to linkage to the hormone binding domain and release of the β-glucuronidase through caspase cleavage of the cleavage site restores activity of the β-glucuronidase.

Claims 10-20 (canceled)